

The South County Greenspace Project

Executive Summary

In recent years, a great amount of attention and effort has been directed at the discovery of new ways to protect the unique character and abundant resources of Washington (South) County while accommodating new development and growth. Complementing the work of the *South County Technical Planning Assistance Project*, which assembled useful tools and techniques for more sustainable planning, design and land use regulations into a suite of five manuals such as, the *South County Design Manual*, the *South County Greenspace Project* set out in the Fall of 1999 to unite the diverse goals of local, state and federal players into a set of strategies for protecting the landscape of South County. This report attempts to explain the details of the project; it outlines the purpose of the project, its participants, how the work was completed and its major findings. In doing so the report explains how communities can work with state and federal partners to protect their most valuable natural, cultural and recreational resources with the help of current land use analysis and mapping technology (GIS) as well as creative land use techniques such as, conservation development.

The *Greenspace Project* had six overall objectives: 1) Inventory and prioritize natural, cultural and recreational resources; 2) link local priorities into a regional greenspace strategy; 3) demonstrate the value of forestland; 4) demonstrate principles of Conservation Development and other creative techniques; 5) identify areas with multiple resource values and promote conservation of community character; and 6) clarify priorities of key stakeholders and foster partnerships to achieve shared goals. It successfully accomplished these considerable objectives with the cooperation and support of dozens of community members and many organizations and agencies that gathered together for four local workshops in each town and two regional meetings over a year and a half timeframe.

The following project report begins with some background on South County, an overview of the project, the project partners and participants and the major conclusions discovered along the way (Part I). These major findings are summarized here:

- ⌘ The identification of **protection targets** coordinates and focuses future resource protection and restoration activities.
- ⌘ South County has a wealth of special natural, cultural and recreational resources that are simply too numerous to protect by conventional acquisition methods. Therefore, **the application of creative land use techniques** that can preserve open space as land is developed will be necessary.
- ⌘ Aggregates of natural, cultural and recreational resources protection targets define or, capture the essence of, South County's **community character**, which means that the protection of the region's uniqueness depends on multifaceted protection, preservation and restoration efforts.
- ⌘ Agencies and organizations often pursue distinct land protection goals but coordinated protection planning can lead to **complimentary and/or collaborative activities**.

Part II lays out the planning process or, methodology, used by the consulting team to collect data, map resources and conduct workshops with community members. Results of the intensive mapping are presented in Part III. **Protection Targets** are illustrated on regional scale maps and discussed in this section. Lastly, Part IV consists of a detailed presentation of the project's recommendations for implementation. Recommendations are presented in two sections: Section A presents communities with practical ways to use the greenspace planning techniques in their local land development process based upon the conclusions of Randall Arendt's local land use plan audits and the many tools offered by the *South County Technical Planning Assistance Project*. Section B summarizes some key activities by major partners in the region.

I. Introduction

Background

South County is blessed with a remarkably diverse landscape, a landscape shaped by both natural and cultural forces over thousands of years. Its basic form is rooted in the geology of the region, shaped by the glaciers of the last ice age, and molded since by the action of wind, water, and communities of plants and animals. From the wooded hills in the northwest, rivers and streams drain a series of narrow valleys, and flow through a rich belt of farmland that crosses the county's waist. Backing up behind a chain of stony hills that mark the farthest advance of the glaciers, these streams form a string of ponds and swamps, merging eventually into the Pawcatuck River and flowing to the sea at Westerly. Along the east coast, coves and inlets alternate with the land at the edge of Narragansett Bay; to the south, the barrier beaches and salt ponds support a wealth of plants and animals.

Overlaid with this natural landscape is a cultural landscape of farms, forests, mill villages and town centers that evolved in an intimate relationship with the land in three centuries since European settlement and previous millennia of use by Native Americans. Traditional land uses and settlement patterns were based on local resources of farmland, timber, and water power. Village centers grew in areas with protected harbors, at cross roads, and at the natural center of agricultural or mill districts. The natural systems that underlie these human settlement patterns were not erased, but rather incorporated into a larger composition that is both functionally stable and beautiful to look at. What was passed down to current residents of South County is thus a rich landscape heritage, one that offers a balance of clean water, a healthy environment, scenic resources, and plentiful outdoor recreation -- all of which adds up to a high quality of life.

Though still largely unspoiled, however, South County is threatened by the sprawling suburban development that has overtaken areas closer to major cities. This is particularly noticeable because this new development, no matter where it is located, tends to follow the same monotonous patterns, reducing everything to a simple formula repeated over and over. Residential development, for which most of the county is zoned, is for the most part restricted to one or two-acre lots spread out along broad cul-de-sacs. Commercial development extends along the state highways outside of older town centers, driven primarily by the larger national chains stores with their "big-box" buildings and sprawling parking lots. Old commercial strips are abandoned as new strips form farther out. Meanwhile, Main Streets struggle to attract tenants, and donut shops and self-storage structures replace historic buildings.

Other changes in land use have a less direct, but still notable impact on the landscape of South County. Farming continues to evolve from small family-owned farms to corporate agribusiness. Old meadows, hedgerows and thickets are bulldozed to make room for larger farming equipment. Irrigation of sod farms and other crops affects ground water supplies. Runoff from farms impacts streams and ponds. New golf courses convert historic farm landscapes to green, but sterile fairways. Meanwhile, changes in use and ownership are limiting public access to open space, as lands are posted to keep out hikers and hunters, and the second home and tourist industry limits access to private lands.

For years, state conservation agencies, town governments, and other public and private groups have been working to preserve the South County Landscape and to ensure public access to open space. Yet the results of these efforts are sometimes diluted because they are not coordinated by an overall plan, and often proceed on an ad hoc basis as opportunities arise. Often, state agencies and non-profit groups pursue relatively narrow aims, usually focused on preservation of sensitive environmental resources. Meanwhile, local efforts, including changes to zoning ordinances that shape growth patterns, are developed largely through plans that end at town borders. The result has been that large amounts of land have been preserved in South County, but the overall pattern is a patchwork of different pieces, rather than a unified network of protected open space. The South County Greenspace Project grew out of a realization that surely much more can be accomplished if there is some coordination between agencies, and between what is being done at the regional scale and what each town is doing. The means to do this are through creation of local and regional plans that set down physical priorities for open space protection and recreation, as well as coordination of action steps among the different parties involved in conservation and open space management. The purpose of this report is to describe the creation of these plans and to set down such action steps for review by all participants in the process.

Project Overview

Early in 2000, the Rhode Island Department of Environmental Management was awarded a grant from the USDA Forest Service to prepare a regional greenspace protection and implementation strategy for the communities of South County. RIDEM hired a team led by Dodson Associates to facilitate a planning process that would start locally with a series of meetings in each of the nine towns of South County, and end with the creation of a regional Greenspace protection strategy. RIDEM's Sustainable Watersheds Office, the project manager, assembled a technical advisory committee to help plan and supervise the project, and throughout has worked closely with the Rhode Island Rural Lands Coalition, the University of Rhode Island, and the Washington County Regional Planning Council.

The South County Greenspace Project was designed to bring the process by which open space resources are prioritized into a single system, allowing parties with many different perspectives to work together toward a common goal. To do so, it was consciously designed to avoid the sort of "single-issue" open space planning that can happen when plans are prepared by a town board or state agency concerned with only one type of resource. This can lead, for example, to open space plans that do a good job of protecting wildlife habitat while ignoring scenic views, or to bike paths proposed for sensitive wetland areas. To avoid these problems, the process evaluated three distinct resource types: **natural resources**, such as wetlands, aquifers and wildlife habitat; **cultural resources**, such as historic sites, scenic vistas and rural landscapes; and **recreational resources**, like hiking trails, bike touring routes and water trails. Protection priorities for each of the three resource themes were mapped out first, and then overlaid with each other to identify landscapes that are key to South County's visual character and quality of life.

The result of this effort was a set of local and regional maps that identify priorities for each of the three principal themes. Together, these provide the information necessary for state agencies, towns, and non-profit conservation groups to make coordinated decisions about open space protection and management. In some cases, the plan determines specific areas that should be protected (e.g. aquifers and riparian corridors) but, it also is meant to clearly show the networks of natural and

cultural resources that exist, and to promote a vision of how they could be united into a permanent network of greenways and greenspaces.

The project had six overall objectives:

1. Inventory and prioritize natural, cultural and recreational resources.

The project assisted communities in identifying and mapping resources using a Geographic Information System. These locally identified resources were then linked throughout each community to demonstrate how important resources can be connected to form continuous linkages or greenways. Each town received customized greenspace maps for all three coverages, as well as priority plans which demonstrate how to use the maps to set priorities for open space conservation.

2. Link local priorities into a regional greenspace strategy.

The individual town maps were then used as a basis to link community priorities regionally throughout South County. These regional plans show the larger patterns created by looking at each of the three resource themes on a regional basis, and demonstrate to both local and regional agencies which local priorities are also important from a regional perspective.

3. Demonstrate the value of forestland.

Since forested lands are particularly valuable for both wildlife habitat and water quality protection, the project sought to identify these areas and determine their interaction with other key resources such as wetlands and river corridors. Forested river and stream corridors and large blocks of forest adjacent to water systems were identified as basic building blocks of a permanent regional reservoir of biodiversity.

4. Demonstrate principles of Conservation Development and other creative techniques.

Since communities cannot buy outright all the land with open space value identified in the study, the project demonstrated how creative land use planning and regulatory techniques can be used to protect open space in perpetuity as land gets developed. An audit of local plans and ordinances prepared by Randall Arendt outlined potential conflicts between local conservation goals and current regulations, and provided detailed recommendations for each town's Comprehensive Planning process, zoning ordinances, and development review procedures.

5. Identify areas with multiple resource values and promote conservation of landscape character.

Even though areas with a diverse combination of natural, cultural and recreational resources may be critical to the preservation of local character and quality of life, they may not be a priority for protection because they lack resources critical to any single constituency. The project sought to identify these areas and promote an understanding of their importance to the character of local communities, the tourism industry (South County's largest economic generator), and preservation of linkages between large areas of land that have already been protected.

6. Clarify priorities of key stakeholders and foster partnerships to achieve shared goals.

To promote implementation of a shared regional greenspace protection strategy, the project involved key stakeholders at every level, and produced a list of action strategies tailored to each group that will play a role in implementing the plan.

The South County Greenspace Project is designed to serve as an ongoing guide to protection of key landscapes and management of development in sensitive areas. Towns and private conservation groups can use the plans that resulted from over 40 local and regional meetings to prioritize which parcels are important enough to purchase outright. In other areas, development may continue, but groups can use the Greenspace Plans to work with landowners and builders to protect the most important open space on each parcel. In this way, the development process itself can be used to help create a permanent network of protected open space. On the state level, conservation agencies can use the Greenspace Plan to review and coordinate their own plans for acquisition and management of open space. It will also help state and federal agencies review applications for open space grants submitted by towns, and rank key parcels for protection. With this in mind, there are two key recommendations coming out of the project:

1. Regional agencies and non-profit groups should work to implement parts of the plan that fit their individual mission statements, while giving special attention to areas where their individual priorities overlap those of local towns or other regional groups.
2. Towns should use the plans as a model for the next generation of local Open Space and Comprehensive Plans. Such plans will use the greenspace planning approach to set clear priorities for open space preservation, as described by a map designating potential town -wide greenspace networks at the level of individual parcels.

1) One Region, Many Players

- 2) The South County Greenspace Project rides on the heels – indeed stands on the shoulders – of the many federal, state, regional, and local groups and agencies that are already involved in conservation and management of open space in South County. These include government agencies at all levels, from the federal Department of the Interior to the local Planning Boards and Conservation Commissions, and non-governmental groups from the globally-active Nature Conservancy, to the Audubon Society of Rhode Island, down to local land trusts active in almost every town. Each of these entities has an established mission and methodology for setting priorities for open space conservation. By way of an introduction of what these groups might do to work together to implement the recommendations of this report, what follows is a brief review of who they are and what they are doing.

One of the more active federal agencies in South County is the **United States Fish and Wildlife Service**. A service of the Department of the Interior, the Fish and Wildlife Service's mission focuses on "working with others to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people." As part of that effort, the service manages a National Wildlife refuge system of 93 million acres, and operates more than 200 fish hatcheries, field offices and ecological service field stations. Locally, the Fish And Wildlife Service manages a complex of five refuges in Rhode Island from a regional office in Charlestown, and is in the process of developing a visitor's center adjacent to Burlingame State Park. Local managers are working with landowners surrounding these existing refuges to enhance protection of some of South County's most important natural areas.

Another federal agency active in conservation is the **US Forest Service**, part of the United States Department of Agriculture. The Forest Service was established in 1905 “to provide quality water and timber for the Nation’s benefit.” As managers of 191 million acres of forest and rangeland, the Forest Service’s mission has evolved over the years to include recreation, protection of wildlife habitat, and education – but always with founding director Gifford Pinchot’s overarching goal in mind: “to provide the greatest amount of good for the greatest amount of people in the long run.” Part of that continuing effort is promoting sustainable use of forests in more densely populated states like Rhode Island – which is one reason they sponsored the South County Greenspace Project.

- 3) Like the US Forest Service, the mission of the **Rhode Island Department of Environmental Management** has broadened and deepened over the years to incorporate diverse interests in environmental protection, management of forests and farmland, and recreation. Indeed, RIDEM’s **Sustainable Watersheds Office** has been at the forefront of efforts to promote sustainable growth in South County, obtaining funding and managing both the South County Watersheds Technical Planning Assistance Project, and this South County Greenspace Project. Numerous other offices within RIDEM are involved in acquisition and management of open space: The **Division of Forest Environment** manages 40,000 acres of forestland owned by the state, and works with private landowners to conserve forest resources. The Forest Environment Program also monitors forest health, runs an Urban and Community Forest Program, licenses arborists, enforces laws, and provides forest fire control. Under the Forest Legacy Acquisition Program the Division preserves key forest tracts, especially within and adjacent to existing state forests. RIDEM’s **Division of Fish & Wildlife**, like its federal counterpart, is charged with protecting and managing fish and wildlife resources within 24 management areas totaling over 46,000 acres. Their mission is “to ensure that the Freshwater, Marine, and Wildlife Resources of the State of Rhode Island will be conserved and managed for equitable and sustainable use.” The Division of Fish & Wildlife pursues research, education, fish hatcheries and stocking programs, habitat restoration, public angling and hunting programs, and development of public access, including over 100 boat launching ramps and shore fishing areas.

The Rhode Island Natural Heritage Program is another RIDEM program, whose mission is to develop and maintain “a comprehensive statewide inventory of Rhode Island’s rarest and most vulnerable natural features.” The program maintains an extensive database about rare species and the ecosystems on which they depend, helps review open space acquisitions, and conducts annual surveys to increase the state’s knowledge of biological resources. To coordinate the activities of the different divisions in acquiring land, the **Land Acquisition and Real Estate Office** employs four state or federal programs to fund open space purchases: The Agricultural Land Preservation Program, which purchases farmland development rights; the State Land Acquisition Program, which “uses state, federal and foundation funds to acquire property for recreation, hunting, fishing, and other outdoor activity”; the Forest Legacy Program; and the North American Wetland Conservation Act, which uses federal funds to preserve waterfowl habitat.

The **Rhode Island Water Resources Board (RIWRB)** is an executive agency in state government charged with managing the proper development, utilization and conservation of water resources. Its primary responsibility is to ensure that sufficient water supply is available for present and future generations, apportioning the available water to all areas of the state, if necessary. The RI WRB and the **RI Water Resources Board Corporate** have broad authority in planning, developing, and

managing public water supplies deriving its' powers, duties & regulatory authority from RI General Laws §46-15 et seq. This agency also acquires land, water rights, and easements for all water supply needs; design and/or construct water supply facilities; lease, sell or effect mergers of water supply systems; and loan or borrow money for water supply facility improvement and land acquisition to protect watersheds. The agency works in partnerships with the twenty-nine major public water suppliers in the state to accomplish many objectives. RIWRB's **Property Management Division** is charged with managing and protecting the **Big River Management Area (BRMA)**, which consists of approximately 8600 acres of open space. The BRMA's intended use designation remains water oriented but the agency has in place a framework to evaluate suitability and permissibility of various land uses such as water resource management, wildlife management, forestry, historical preservation and environmental education.

Until fairly recently, most government-sector planning in South County happened either as part of Statewide plans or within the borders of individual towns. **The Washington County Regional Planning Council** was established to bridge this gap, with the goal of "balancing growth and preservation to achieve a sustainable future." Made up of representatives from each of the county's nine town councils, the Planning Council in 2000 published "A Shared Future: Washington County in 2020," which expresses a common vision for the region developed during several years of meetings, public workshops and extensive interviews of key stakeholders. This shared vision includes "clean and plentiful waters... a landscape of village centers and open spaces... a healthy economy... diversified housing choices... [and] safe and efficient transportation." The South County Greenspace Project, together with a companion study of economic development sponsored by Grow-Smart Rhode Island are the initial steps in implementing the Planning Council's Vision.

Private conservation groups have a long history in Rhode Island, starting with the **Audubon Society of Rhode Island**, which was founded in 1897 to stop the practice of killing wild birds for their feathers. Since that time, the Society's mission has grown to include environmental education and advocacy, field programs, and a system of public refuges. In South County, Audubon has a particular concentration of refuges along the main stem of the Queen River in Exeter, and continues to be a vital watchdog in the areas of wetland protection, habitat protection for rare birds and amphibians, water quality and environmental pollution.

The **Nature Conservancy** came much more recently to Rhode Island, but with a focus on protecting land through direct acquisition has managed to preserve over 20,000 acres. Some of these projects helped other state and local agencies expand existing preserves, and the group manages 15 of its own properties around the state through its headquarters in Providence. The Nature Conservancy is unique in taking a truly bioregional perspective on its programs, and in Rhode Island this has led to several regional initiatives. The first is an ongoing project to protect the Queen River, which they consider one of the healthiest in the state. The second is an even larger conservation initiative called the Pawcatuck Borderlands, which seeks to preserve the large areas of undeveloped forest on the Rhode Island/Connecticut Border, which they have identified as one of the last extensive hardwood forests in New England.

The **Wood-Pawcatuck Watershed Association** was created in 1984 as an advocate for the unique environment of the Wood-Pawcatuck River Watershed. Since that time, WPWA has expanded in scope and staff, and is active in education and outreach, water-quality monitoring, a development of river access and management plans. During 2000 and 2001 WPWA developed a Pawcatuck Watershed Action Plan to address three priority issues:

“riparian corridor protection, water quality monitoring, and protection of water quality and equitable allocation of water during droughts.”

On the Eastern side of the county, the **Narrow River Preservation Association** pursues a mission “to preserve the quality of the communities and natural environment within the Pettaquamscutt (Narrow River) Watershed.” Like the Wood-Pawcatuck group, the NRPA acts as a clearinghouse of information, education and outreach, and coordinates activities of local, state, and federal agencies in monitoring change in the area and advocating for conservation issues. The allied **Narrow River Land Trust** works with landowners to secure donations of land and development rights; a process that has ensured protection of nearly 500 acres of land.

Another river-focused group is the **Saugatucket River Heritage Corridor Coalition**. Dedicated to the care and celebration of a more urbanized river with a rich cultural history, the SRHCC works “to create partnerships among diverse stakeholders and have grown to include representatives of fifteen neighborhood, civic and other organizations interested in the welfare of the watershed...” The groups goals include “To provide a forum for views and attainment of consensus on uses of the river and its immediate environs; To seek funding for projects to improve access for conservation sensitive uses; To increase the river's value as a source of scenic enjoyment; To increase public awareness of the river's cultural history; To promote economic well being through sustainable business.”

The **Salt Ponds Coalition** was created in 1986 “to act as a focal point for programs designed to preserve nine coastal salt ponds along Rhode Island Atlantic coastline.” Recognizing that these are valuable economic resources to the tourism and fisheries industries, as well as unique ecosystems, the Coalition pursues a mission of education and environmental protection, with an emphasis on coordinating the activities of state and federal agencies with local plans and projects. They are active in volunteer monitoring of water quality, restocking of shellfish, and working with landowners, cooperative extension, and RIDEM on new approaches to septic education and wastewater management in sensitive coastal areas.

Along with these state and regional agencies and conservation groups, nearly every South County Town has an active public or private land trust working to preserve land. These include the **South Kingstown Land Trust**, the **South County Conservancy**, the **North Kingstown Land Conservancy**, the **Richmond Rural Preservation Land Trust**, the **Hopkinton Land Trust**, the **Westerly Land Trust**, and the **West Greenwich Land Trust**. Each of these groups has a specific mission, but most focus on protection of open space containing natural, cultural and recreational resources. Most work closely with local boards and commissions, but take advantage of a Land Trust's ability to act quickly to protect key parcels of land when they come on the market, to accept donations of land and money, to hold development rights and conservation restrictions, and to advocate for conservation issues.

To coordinate the work of these local land trusts, the **Washington County Land Trust Coalition** was formed in 2000 to encourage and coordinate land protection efforts across town boundaries. Organized by a memorandum of agreement among six land trusts, the WCLTC meets regularly with several partner organizations to pursue shared planning and conservation projects.

Conclusions

4)

The South County Greenspace Project required hundreds of hours of data collection, map making and discussions to complete. Several important realizations about the protection of natural, cultural and recreational resources in South County resulted from this noteworthy effort and will serve to guide implementation of a coordinated protection strategy for the region:

1. The identification of **protection targets** coordinates and focuses future resource protection and restoration activities.
2. South County has a wealth of special natural, cultural and recreational resources that are simply too numerous to protect by conventional acquisition methods. Therefore, **the application of creative land use techniques** that can preserve open space as land is developed will be necessary.
3. In many cases, combinations of natural, cultural and recreational resources protection targets define or, capture the essence of, South County's **community character**, which means that the protection of the region's uniqueness depends on multifaceted protection, preservation and restoration efforts.
4. Agencies and organizations often pursue distinct land protection goals but **coordinated protection planning** can lead to complimentary and/or collaborative activities.

5)

- 6) The overarching goal of the project is to unite the diverse objectives of local, state and federal players into a set of strategies for protecting the landscape of South County. Thus, there is an emphasis on finding areas of overlap between different landscape values: not looking for the most significant habitat of a particular rare species, or the single most historic spot, for example, but rather those areas and connecting landscape corridors that still represent the traditional landscape diversity that makes South County such a wonderful place. Clean air and water and healthy ecosystems are fundamental to these areas, so in a broad sense the project shares the goals of the US Forest Service, RIDEM, and The Nature Conservancy in protection of large blocks of forest land, and wooded stream corridors. But equally important are local goals for protection of "community character" and quality of life, as expressed in many of the local Comprehensive Plans.

As described below, the methodology of the project was consciously designed to bring these overlapping goals and values together. Information from the state level was presented to the towns, and a process of inventory and analysis was undertaken in each community so that the information and recommendations generated could be easily incorporated into local planning efforts. As the project progressed, representatives from each town participated in regional meetings to coordinate efforts across local boundaries. This helps to meet the goals of RIDEM's Sustainable Watersheds Program, which is designed to help towns think regionally about environmental issues.

A final goal of the project, shared by many on both the state and local levels, is to foster partnerships between the different groups that are already working so hard to protect this special place. This will have practical benefits, for example, in connecting local groups that have important projects with the financial resources and expertise to accomplish them. Just as importantly, it will bring South County up on the radar screen of those entities whose mission is to protect the

resources of the larger landscape of New England and beyond. This recognition, in turn, will help build local support for protection of South County through means not available to outside groups: creative approaches to local zoning and development regulation; development of regional recreational resources, investment in local parks, and so on.

The South County Greenspace Project represents the first open space plan prepared for the entire South County region, and the first time that local plans based on extensive public input have been united into a regional plan. All six of the major objectives outlined above were met, as described in the following sections of this report. In part II, the Greenspace Planning methodology is described in detail, including the **first objective** of inventorying key open space resources through the work of local committees and the **second objective** of linking local plans into a regional vision. The regional inventory and analysis maps that came out of this process are presented with a description of what each one shows and what it means. The **third objective**, demonstrating the value of forestlands, was met as part of the natural resources analysis.

You will note that the Greenspace Strategy is not a single plan, but a series of plans and alternative priority maps that incorporate the goals of many different entities operating at different scales. This recognizes that agencies with a mandate for protecting wildlife habitat, for example, cannot and do not expect town governments or local land trusts to agree to the same set of priorities. Still, as described in the **fifth objective**, there are areas of South County that contain a rich tapestry of natural and cultural resources, as well as recreational opportunities, occurring together in a limited area. If you look at examples of these resources separately, none of them may be very special – but taken together, they produce that rich diversity of visual experience and human activity that gives the traditional landscapes of South County their special character. By identifying these areas, as well as the larger corridors by which some of them are connected, we can see some special opportunities for preserving not only the most special places, but also the more ordinary -- but equally priceless -- landscapes that are critical to maintaining the “sense of South County.” Eleven of these areas are described in the “Landscape Preservation Plan” found in Part III of this report.

In part III, protection targets are presented for each of the resource themes. Part IV introduces specific recommendations for local, regional and state entities that are working “on the ground” to implement a more coordinated action strategy, this meets the **sixth objective** of clarifying priorities and fostering partnerships. This section also includes the **fourth objective** of demonstrating principles of Conservation Development and other creative techniques that allow towns to harness the development process itself as a means to preserve open space.

7) II. The Greenspace Planning Process: Methods

The Greenspace Planning Process was designed to work from the bottom up. Each town went through an individual process of inventory and analysis, resulting in preliminary maps of Greenspace priorities in each community. These local plans were then compiled into a series of regional inventory and priority plans for review at several regional meetings. The results are designed to provide a detailed, but flexible base of information that can be used by local commissions as well as state agencies to achieve shared goals for landscape protection. As the process went along, it was determined that agreement on a single set of priorities would be difficult, if not impossible: the final maps are therefore designed to be used and overlaid in different ways depending on the focus of an individual group or agency.

The method used for the Greenspace Planning Process followed a traditional landscape planning model: data about different types of resources were compiled; inventory maps were prepared showing the location and patterns of these resources; then these inventory maps were overlaid with each other to identify those areas and connecting corridors with multiple resource values. The process began with a series of maps prepared by the Environmental Data Center at the University of Rhode Island. This “Critical Lands” analysis produced a series of maps for each town at a scale of 1” = 2000’: base maps with 1995 orthophotography and standard USGS mapping; critical farmland resources, which overlaid cleared agricultural land with prime agricultural soils; critical groundwater resources, showing aquifers, recharge areas and wellhead protection areas; critical cultural, recreational, and aesthetic resources; and critical biodiversity resources, including forest, wetlands, and rare species habitats, along with 300’ buffer of rivers, wetlands, and protected lands. The areas covered by these different resources were overlaid and compared, which allowed for the calculation of their co-occurrence. A final *Composite Map of Critical Resources* was created for each town showing where the overlap of critical resource areas occurred. Three levels of value, representing the degree of overlap, were described: valuable, critical, and very critical.

These maps were invaluable in sharing with local committees the information that is available on the Rhode Island Geographic Information System, a central depository of maps and data that is maintained at the University of Rhode Island. Based on a review of this information, a greenspace planning methodology was created that regrouped existing data into three themes – natural, cultural, and recreational resources – and combined mapping and analysis in the office with public review and refinement at the local level.

While the actual process varied somewhat from town to town, the public participation process was designed as a series of four meetings in each community. **The first meeting** was held as a joint session of the local Planning Board and Town Council. The consultant team introduced the project, presented the critical lands inventory maps, and posted wall-size base maps for review. Attendees were asked to volunteer to serve on a Greenspace Planning Committee, and those that did so were divided into three sub-groups to focus on the three key resource themes. Each of these subgroups then met with a member of the consultant team to review the base maps and existing information, to discuss what additional information would be needed to move forward, and to strategize about how to get it and put it on the maps.

Both local volunteers and members of the consultant team came back to the **second meeting** with additional information, sketch plans, and reports providing information about each of the three resource themes. Each group was asked to present the information they collected, and the consultants led discussion about what conclusions could be drawn and what additional information was needed. Throughout the process the emphasis was on understanding the systems that underlie the occurrence of a particular resource. For example, we want to know not only that a rare orchid has been found in a particular place, but also why it is there. What is the ecosystem that supports that species, and how big is the surrounding landscape upon which it depends? Likewise, if certain structures have been identified as historically significant we want to know not only where they are, but also how do they fit into the larger landscape history of the town? What stories do they tell about the history of the community?

The consultant team returned to the **third meeting** with revised maps of natural, cultural and recreational resources for review by the town greenspace committees. Attendees were led in a

discussion of important sites and potential linkages for each of the resource themes. Preliminary overlays were presented that began to explore how the three principal resource themes overlap, and various systems for prioritizing open space values were discussed.

At the **fourth meeting**, the consultant team presented a final draft of each town's resource inventory and priority maps for review and discussion. These were compared with maps of lands already protected to examine potential gaps in important resource corridors and opportunities to incorporate larger resource systems into lands already preserved. Maps showing various ways of prioritizing open space were presented for review, and while no single conclusion was reached we concluded by presenting the landscape preservation approach to using the information. While each town will have to sort out its own priorities, the idea is that those areas that include a balance of natural, cultural, and recreational resources are key to the visual character and quality of life in South County, and represent the common ground where the interests of many diverse groups come together.

As the local process was concluding, the local greenspace volunteers, together with other town officials and interested citizens, were invited to convene at several **regional workshops**. At the first workshop, maps were presented that compiled all the local data into a single inventory for each resource type. Participants broke into small groups to discuss the map results and approaches to setting regional priorities for greenspace protection. For the second workshop, revised maps were presented for review, along with several alternatives for setting priorities for action. Extensive discussion helped determine the final set of inventory and resource priority maps that are found in this report.

As the regional greenspace process proceeded, attention turned to how towns and regional groups could best **implement the greenspace strategy**. As part of this process, Randall Arendt, a nationally known expert in the use of Conservation Design and other techniques that use the development process to create open space networks, prepared an audit of each town's Comprehensive Plan, Zoning Ordinance and Development Regulations. A detailed report was presented to each town at a meeting of the Planning Board. Meanwhile, a final set of local maps was presented to planners in each community, and made available on RIDEM's web site. As towns reviewed the maps and recommendations for local planning and zoning, the consultants worked with the steering committee and the Sustainable Watersheds Office to prepare a series of targets that are found in part III of this report.

8) The Process of Mapping and Geographic Analysis

While the process of mapping and analysis generally followed a traditional planning model, the way information is recorded and presented in the final set of maps was designed to encourage an unusually broad approach to identifying open space resources. While there is no "right way" to do this, by explicitly developing separate maps for natural, cultural, and recreational resources, this approach requires development of a much more complete understanding of all three areas than is usually attained. At the same time, the limitations on volunteer time and project budget forced the project to make good use of existing data, with carefully targeted development of additional information. The final content of the maps represents the collective review of all the local committees, which were quite consistent in their reaction and recommendations. As described below, the three primary themes represent an objective perspective and a reasonable consensus

about which resources are of most concern to towns as they try to protect the environmental health and quality of life in South County.

Natural Resources

Natural resources were mapped primarily using the most current data available from the Rhode Island Geographic Information System. The most critical natural resource for South County Communities is **water supply**, which was mapped using three types of areas: aquifers, aquifer recharge areas, and wellhead protection areas. **Surface waters systems** are critical to the ecology of the county. These included rivers, streams, ponds, and wetlands. A three hundred foot buffer around these surface waters was shown to indicate the area that is most critical to protect both wildlife habitat and water quality. Overlaid with these physical resources were **rare species habitat** areas identified by the Rhode Island Natural Heritage Program. These include documented occurrences of rare species as well as surrounding areas that are critical to their ongoing survival. Finally, in our discussions with scientists at the University of Rhode Island and the Nature Conservancy, it was determined that of all factors in measuring wildlife habitat, the presence of large tracts of undeveloped forest – especially when connected to river and stream corridors – provides the highest value for preservation of all species of wild plants and animals. Lacking an existing data layer for these areas, the consultant team used the 1997 aerial photographs from RIGIS to create a new digital map of **large forest blocks**.

Cultural Resources

While natural resources evolved and continue to grow without human influence, cultural resources generally include anything that people have made, or that people care about. These include historic sites, scenic areas, working agricultural landscapes, etc. This includes both the kind of things that can be objectively described, such as an historic farmstead that Washington slept in, as well as places that are important to the history of a particular culture or the ongoing life of a town. Like natural resources, the study of cultural resources can engender a long list of potential factors; in order to fit the analysis into the time that was available we identified three key groups of cultural resources: historic resources, scenic landscapes, and special places.

The inventory of **historic resources** began with historic and archaeological sites that have been identified at a statewide level and mapped as part of RIGIS. Because this is limited to those that have been listed, or are candidates to be listed on the National Register of Historic Places, many locally important historic sites were not identified. It was determined that the best source for additional information is a series of Historic and Architectural reports prepared by Rhode Island Historical Preservation Commission. Each of these reports contains an inventory and evaluation of many local sites, which were digitized as a new geographic data set. These sources, however, usually focus on a specific structure or group of buildings, without mapping the landscape context. By this we mean that area which was traditionally connected functionally to the structure or site, and which continues to be important to maintaining its visual character. Many old New England homesteads have been protected, for example, while the fields and woodlots that surround them were developed, destroying the historic landscape resource itself, but as importantly diminishing the value of the structure at its center. For our purposes, then, the task was to identify those historic sites and surrounding landscapes that still exist, drawing a boundary on the maps to mark the minimum area

that should be protected or managed to protect that cultural landscape. These areas, which include agricultural landscapes, mill sites, and historic village centers, are identified as heritage landscapes.

The evaluation of **scenic landscapes** likewise began using a statewide inventory known as the Rhode Island Landscape Inventory, and another statewide survey of scenic roads. Volunteers on the local committees enhanced this information using town reports and windshield surveys to identify areas with high scenic quality at the neighborhood scale, with an emphasis on those that are visible from public areas. Specific views or vista points were also identified.

The final category of cultural landscapes that were identified was “**special places**.” These include all the places in town that people care about, those “places in the heart” that may not be valuable in and of themselves, but which are nevertheless critical to local character and quality of life. They may be scenic spots or historic sites, just as often they are local hangouts, places where people go to meet each other, or just to get away from it all. In some towns these were compiled from existing surveys or planning studies; in others volunteers posted maps in public places and asked people to mark down their special places.

9) *Recreational Resources*

The focus of the recreational resource analysis was opportunities for active recreation, especially trails and other recreational routes. Three types of trails were identified in the inventories, which located both existing trails and potential future trails. Existing **hiking trails** were identified by local volunteers on USGS base maps, and compiled from trail maps published in trail guides. The Nature Conservancy supplied a digitized alignment for the North South Trail, which is the only existing regional trail. Potential future trails were identified based on aerial photographs and USGS maps, with a combination of local knowledge of informal trails and expert opinion about what might be possible using a combination of public roads, utility corridors, overgrown woods roads, etc.

Likewise, **bike trails** and routes were identified with the help of local volunteers, who extended the limited system of rail trails and marked routes with their knowledge of the best bike routes on existing roads. Of all the possible routes, the emphasis was placed on those which offered a combination of natural and cultural landscape experience, scenic value, and logical destination points.

The final kinds of trail identified in the study were **water trails**. Like bike routes, these exist, in theory, wherever there is navigable water. As a practical matter, turning these into useable trails that connect places people want to go requires a large amount of planning and field work. This was ably supplied by the Wood-Pawcatuck Watershed Association, which prepared a detailed inventory of existing and potential access points for the majority of the Pawcatuck Watershed. Other access points were identified from RIGIS coverages of boat launches and marinas, and volunteers in each community helped in planning potential boating routes along the coast, through the salt ponds, and in some of the shorter river systems.

Lastly, **destination points** were identified, both to locate fixed recreation sites like parks, playgrounds and schools, and to evaluate the potential of the various trail systems in developing a network connecting important points around the county. These points were divided into primary destinations, such as village and town centers, regional transit hubs, and the University of Rhode

Island, and secondary destinations, such as smaller parks, playgrounds, conservation areas, and schools.

III. Mapping & Results

10) *Protection Targets*

The diverse collection of groups and agencies involved in open space conservation in South County will, of necessity, continue to pursue their individual goals and objectives. It is hoped, however, that by focusing on the shared goals that have been identified by this project, these groups can more effectively shape a permanent open space network for South County. The following **Targets** have been identified over the course of the project as the most important to realizing this overall goal. They represent a compilation of what the team heard from town committees at the local workshops, recommendations that came out of the regional conferences, and interviews with key stakeholders. With the broad spectrum of groups involved, it is impossible to claim that one target is the most important, so they are divided into separate targets and strategies for natural, cultural, and recreational resources.

11) Protection Targets for Natural Resources

[See regional maps and text as previously distributed or at the Greenspace Website: <http://www.state.ri.us/dem/programs/bpoladm/suswshed/scmaps/scmaps.htm>]

1. Inventory of Natural Resources
2. Additional Map - Aquifers, Recharge Areas and Wellhead w/ protected land (include explanation what a 'wellhead' is and why it is mapped the way it is.)

(Example text for Aquifer Map)

The protection of drinking water is the most important natural resource protection target for the South County communities. The U.S. Environmental Protection Agency has designated two aquifers, the Pawcatuck and the Hunt-Annaquatucket-Pettaquamscutt (HAP), as sole source aquifers because they are the only sources of drinking water for their respective regions, which practically encompass the entire South County Region. Therefore, it is no surprise that the greenspace workgroups quickly reached consensus that it is a priority to protect the region's water supplies. As can be seen in **Figure XX**, the aquifer area is extensive. However, the most critical portions of the aquifers to protect are the ground water reservoirs. These areas contain the highest yield of drinking water and are hydrologically linked to surface waters. Protection of ground water reservoirs also helps to protect surface waters, riparian habitat and to form continuous links of protected areas through communities and the region.

All of the communities in the project area have adopted some form of *groundwater protection overlay district* in the local zoning regulations. On the state level, the Rhode Island Department of Health – Source Water Assessment Program evaluates land use and potential drinking water quality threats around public drinking water supplies. Meanwhile, the Rhode Island Water Resources Board works with major water suppliers to protect drinking water supplies under the State's Watershed Protection Program.

3. Natural Resource (Biodiversity) Priorities, including riparian corridors, endangered species, etc (excluding groundwater resources).

[Text as presented with 'Natural Resource Priorities' plus emphasis of riparian corridor value, coastal ponds and Queens River Watershed] [Include the Borderland Forest somewhere within the discussion of biodiversity and show a map of where it is.](#)

4. Natural Resource Priorities with Protected Lands
5. Priority Natural Resource Areas with Conceptual Corridors – Add text to explain how overlapping resources provide for multi-benefit protection, e.g. riparian corridors -> habitat -> greenway -> water trail, etc.

Protection Targets for Cultural & Historic Resources

1. Inventory of Cultural Resources
2. Cultural Resource Priorities – Text should explain elected/identified targets to accent priorities map. Elaborate on existing text with language that emphasizes connections of the 3 resource themes, i.e. links between mill village centers, river access, greenways, growth centers, etc.

TARGET: *Preserve and Enhance Village Centers – Kenyon, Shannock, Carolina, etc.*

The historic village centers of the region are showpieces in what some may call the, 'Living Museum of South County' and represent existing and future growth centers for population and commerce. As communities strive to revitalize village centers and new development threatens their historical integrity, these historical and cultural centers require special attention in the form of thoughtful land use regulation and preservation efforts.

TARGET: *Protect Heritage Landscapes and Scenic Areas/Corridors*

Targets for Recreational Resources

1. Inventory of Recreational Resources
2. Recreational Resource Priorities

TARGET: *River Access and Water Trails*

TARGET: *Trail Development*

TARGET: *Bikeway Development* (Below strategies will be illustrated on the map and discussed in the text.)

- ✧ Extend South County Bike Trail.
- ✧ Complete the West Bay Bikeway from Narragansett to Goddard Park.
- ✧ Develop continuous off-road bike paths parallel to Route One, connecting seaside communities.

TARGET: *Route 1 Overpass at Ninigret or Matunuck*

Composite Maps and Landscape Preservation Plan

3. Composite Map of Natural, Cultural and Recreational Priorities
4. Landscape Preservation Plan Focus Areas

IV. Recommendations for Action

This report ends where it began: with the many different local, regional and state agencies that will be acting to implement its recommendations. Each of these entities has a key role to play in realizing the vision for a permanent network of protected open space in South County. In doing so, the players continue to execute their respective missions. In addition, the below recommendations promote new ways to protect greenspace and to encourage the formation of new partnerships between natural, cultural and recreational interests. Section A begins with an overview of well-established acquisition strategies for land protection and then concludes with specific recommendations to communities based on Randall Arendt's analysis of their local comprehensive land use plans and the techniques outlined in the *South County Design Manual*. Section B lays out several suggestions for many of the agencies, organizations and other groups working to protect natural, cultural and recreational resources in South County.

12) A. Recommendations to Communities

Acquisition Strategies

The recommendations below for buying land are not new. However, this plan does indicate common areas of interest to make it easier for natural, cultural and recreational interests to partner in preserving land. These acquisition techniques are adapted from the Rhode Island State Guide Plan Element #155: *A Greener Path... Greenspace and Greenways for Rhode Island's Future*. This element of the State Guide Plan charts a general course for greenspace and greenway protection for the entire state. Moreover, one very practical part of 'A Greener Path...' is the *Land Protection Toolbox – A Compendium of Acquisition and Regulatory Strategies useful in Preserving Greenspace and Assembling Greenways* (See Table I below). It lists and describes techniques for greenspace protection that apply to most municipalities, agencies and organizations involved in land protection. It is included here as a reference. For more information on funding sources please refer to the grant guide provided in Appendix I.

Table I – Adapted from “THE LAND PROTECTION TOOLBOX - A Compendium of Acquisition and Regulatory Strategies Useful in Preserving Greenspace and Assembling Greenways” ¹	
Acquisition Strategies	
<i>Technique</i>	<i>Description</i>
<i>Fee Simple Purchase & Variations</i>	<i>Acquisition of full title to land and all rights associated with land.</i>
Fair Market Purchase	Open market or negotiated purchase of full title to land and all rights associated with its use.
Donation/Bargain Sale	Outright gift of full or partial interest in property, or sale of property at less than market cost.
Purchase With Sale Or Leaseback Provision	Purchase of full title followed by sale of non-sensitive portion, or leaseback to original owner with restrictive provisions to control future use/development.
Installment Sale	Allows buyer to pay for property over time.
Land Exchange	Swapping of developable parcel for property with conservation value.

¹ Adapted from *Tools and Strategies: Preserving Open Space: A Guide for New England*. Taubman Center, Kennedy School of Government, Harvard University and National Park Service. 1992.

Acquisition Strategies (continued)	
Technique	Description
Option/Right Of First Refusal	Owner agrees to offer designated entity first chance to purchase land before placing on market.
Public Condemnation/ Eminent Domain	Taking of private land by governmental entity for legitimate public purpose upon payment of just compensation.
<i>Less-Than-Fee-Simple Instruments</i>	<i>Acquisition Of Less Than Full Ownership Interest In Land.</i>
Purchase Of Development Rights	Right to development purchased while the landowner reserves the rights to exclusive occupancy and limited usage.
Conservation Easements	Partial interest in property purchased or donated to protect its natural or historic features.
Public Access Easement	Provides right for public to access parcel for specific uses.
Joint Use Easements	Combines multiple uses in one easement instrument (e.g., public access with utility corridor easement).
Permits & Licenses	For fee agreements that specify usage conditions for fixed period.
Lease	Legal arrangement for short or long term rental of property.
Management Agreements/ Plans	Agreement between landowner and agency for specific purpose.
Option/Right Of First Refusal	Owner agrees to offer designated entity first chance to purchase land before placing on market.
Public Condemnation/ Eminent Domain	Taking of private land by governmental entity for legitimate public purpose upon payment of just compensation.
<i>Less-Than-Fee-Simple Instruments</i>	<i>Purchase of less than full ownership interest in land.</i>
Purchase Of Development Rights	Right to development purchased while the landowner reserves the rights to exclusive occupancy and limited usage.
Conservation & Preservation Easements	Partial interest in property purchased to protect its natural or historic features.
Public Access Easement	Provides right for public to access parcel for specific uses.
Joint Use Easements	Combines multiple uses in one easement instrument (e.g., public access with utility corridor easement).
Permits & Licenses	For fee agreements that specify usage conditions for fixed period.
Lease	Legal arrangement for short or long term rental of property.
Management Agreements/ Plans	Agreement between landowner and agency for specific purpose.
Other Measures	
Critical Area Programs	State legislation defining critical environmental areas and establishing review procedures and development standards specific to them.
Infrastructure Availability Measures	Local ordinances setting limits on geographic availability of infrastructure or specifying minimum availability of public services required for different categories of development.
Current Usage Tax Valuation	State law enabling local property tax assessment of resource lands to be based on current usage or resource valuation rather than highest and best usage. Tax rollback or penalty provisions discourage speculative use.

Using Greenspace Planning and Creative Development to Preserve Land

Town governments play key roles, especially planning boards and planners, as the entities that can shape growth through management of the development process through local plans and regulations.

The common thread that unites the below recommendations for local communities is the idea of using the Greenspace Planning Process not to stop development, but rather to guide growth to create vibrant centers while preserving South County's rural character. Land development by private interests is the primary agent of change that most towns face. Since many more areas have value as open space than can possibly be protected through outright purchase, a comprehensive network of open space – either locally or across the region – will only be realized through a collaboration of towns and developers. Changes to local zoning ordinances, such as Conservation Development, will make this possible, but by themselves will not create better projects. Likewise, local comprehensive planning often lacks the detail and clarity of direction that helps individual landowners and site planners make good decisions when planning for development. The detailed inventory and resource priority maps created during the Greenspace Project are designed to fill this gap with specific, detailed information that allows Planning Boards, land owners, and developers to see ahead of time where the most important open space resources are in a town. As each property is considered for development, as most inevitably are, the Greenspace Plans provide a starting place for discussions about where development should be placed on a property in order to protect the resources enjoyed by all town residents.

As part of the Greenspace Project, **Randall Arendt** prepared an audit of each town's comprehensive plan, zoning ordinance and development regulations. These audits are designed to highlight the areas of local plans and regulations that can make it difficult to protect open space effectively both within individual sites, and as a community-wide network of open space. He prepared an extensive report for each community (available from the local planner) and made a presentation to the Planning Board in each town. The **key recommendations** shared by multiple towns include:

- Adopt greenspace maps and other applicable recommendations into comprehensive land use plans.
- Develop a town-wide map of Potential Conservation Lands, comparing various levels of protection to degrees of resource value identified through the Greenspace Analysis.
- Update Comprehensive Plan with descriptions of necessary changes to zoning ordinances and subdivision regulations necessary to implement the Conservation Plan.
- Update the Subdivision Ordinance to include a "sketch plan," Conceptual Master Plan, mandatory site visit, and required site analysis elements, as well as to describe a design process.
- Amend the Zoning Ordinance to incorporate "Growing Greener" mechanisms.
- If it exists in local ordinances, replace "cluster development," with Conservation Development approach, so that new development will contribute substantially to the community's overall conservation objectives, adding specific design standards for the quantity, quality, and configuration of subdivision open space that must be delineated, conserved, and related to the community-wide open space network.
- Provide incentives for projects that help accomplish town-wide open space goals.
- Encourage landowner stewardship. Nongovernmental groups, such as land trusts and watershed associations, best carry out such an effort.

Creative Land Use Techniques: Recommendations of the South County Watersheds Technical Planning Assistance Project

In 2001, Dodson Associates completed a project for RIDEM's Sustainable Watersheds Office that was designed to assemble tools and techniques for more sustainable planning, design and regulation in South County. Developed by a team of designers, planners, water resource specialists, and legal experts, the project produced a series of reports and manuals that were distributed to each of the towns, and which are available from DEM, and can be viewed at:

www.state.ri.us/dem/programs/bpoladm/suswshed/sctpap.htm. The project was designed to gather the best possible solutions from around the country and show how they could be applied locally. With the participation of an advisory committee of more than sixty town planners, elected officials, and citizens, the consultants prepared a suite of "Smart Growth" tools, including a set of Model Zoning Ordinances, Strategies to promote Farming and Forestry, a study of Transfer of Development Rights, and a Development Site Assessment Guide.

The centerpiece of the effort was the South County Design Manual, which demonstrates creative approaches to development and/or revitalization for eight demonstration sites in South County. **As shown in the following pages from the Manual** (Pages 26 – 33) the development scenarios for each site were illustrated with aerial perspective drawings and photographs, designed to show how planning and design can work together to build more sustainable communities. In this example, a typical **rural neighborhood** is shown before and after conventional development. The creative development scenario illustrates how the local greenspace maps could be used to help plan development of individual parcels. With coordinated planning for each property, the development process itself can help preserve permanent town-wide open space networks.

Similarly, significant cultural resources like historic village centers can be protected through the development process when towns adopt historic district overlay zones that combine flexible controls on use and density to promote revitalization, with standards for design that protect historic architecture and landscape character. The South County Design Manual outlines such planning and design techniques for a 'Historic Town Center' (pages 34 – 41) with supporting model language for a new zoning to protect village centers - 'Planned Development District – Village and Neighborhood Sites' – found in the ***South County Technical Planning Assistance Project Model Land Use Ordinances*** (page 101).

B. Summary of Current Activities by Agencies, Organizations and other Partners with regard to Greenspace Protection

As stated in previous sections, there are over a dozen organizations and agencies currently working on the protection (and, in some cases development) of South County's natural, cultural and recreational resources. In order to facilitate inter-organizational cooperation and coordination of protection strategies and activities, this section lists pertinent policies and activities by several key players in resource protection. In addition, the list also provides several suggestions for new or future activity:

- 1) **Local Land Trusts and the Washington County Land Trust Coalition (WCLTC)**
 - Focus protection efforts on wellhead, aquifer protection, and the biodiversity resources outlined in this plan using state open space grant money.

- Pursue land protection projects with partners with cultural and recreational interests to build a meaningful network of greenspace (e.g. regional greenway) as laid forth in this plan.
- Contribute resources toward a regional land trust coordinator through the WCLTC that provides staff support to the region's land trusts.
- Increase land trust advocacy and education role by assisting local planning boards and departments with greenspace planning activities such as, identifying areas that should be protected for new development projects, GIS, maps and protection strategies.
- Coordinate development of interpretive trails with protection of scenic and historic landscape corridors.

2) Washington County Regional Planning Council

- Encourage communities to adopt conservation development and other creative land use techniques into local planning and zoning.
- Coordinate greenspace protection activities with the Washington County Land Trust Coalition.
- Discuss the merit and feasibility of forming a regional cultural and historical preservation commission (e.g. Washington County Historic and Cultural Landscape Preservation Commission) to focus on, land use planning and development issues that impact community character; celebrating and protecting historic town and village centers and rural landscapes and the quality of life they provide; documenting cultural landscape resources and conducting outreach to towns to create management plans for key resources areas.
- Assess the possibility of regional tax sharing to pursue regional strategies for economic development such as, clustering growth into areas with existing development and infrastructure.
- Lead an action team consisting but not limited to the South County Tourism Council, RI Rural Development Council, the chambers of commerce and RIEDC to develop tourism around South County's heritage, natural wealth and recreational opportunities.

3) Watershed Organizations - Watershed organizations play a key role in supporting local governments and land trusts to protect greenspace through acquisition and land use planning efforts. Furthermore, by creating and implementing watershed actions that outline key watershed issues and actions, watershed organizations bring financial and technical assistance to the region to improve riparian access, water quality and recreational opportunities - all integral pieces to the protection and management of greenspace in South County. The four watershed organizations in South County – Narrow River Preservation Association, Salt Ponds Coalition, Saugatucket River Heritage Corridor Coalition, Wood Pawcatuck Watershed Association – could play a key role in implementing this greenspace protection strategy by including the following items in their watershed action plans, where applicable:

- Pursue money/projects to improve access points to rivers and riverbank restoration.
- Improve river access with planning and site development, building on the recent work of the Wood-Pawcatuck Watershed Association to evaluate existing and potential access points. (See APPENDIX II - 'Public Small Craft and Fishing Access Points on the Wood and Pawcatuck Rivers.' Wood-Pawcatuck Watershed Association. November 2001.)

- Identify existing protected areas suitable for access improvements, parking, and facilities development.
- 4) **South County Tourism Council**
 - Tie marketing materials to resources identified in the Greenspace Project to promote South County as a destination for eco-tourism, cultural tourism, and sustainable recreation for hikers, bikers, and boaters.
 - Work with Washington County Regional Planning Council, RI Rural Development Council and others to foster growth of the region's tourism economy.
 - Create maps and interpretive materials to help visitors find and enjoy these resources.
 - Promote heritage tourism to state and local hospitality industry and economic development organizations.
 - 5) **The Nature Conservancy**
 - Continue support and capacity building of local, regional and statewide land trusts and coalitions.
 - Continue to expand the current protected cores of the Queens River Watershed Borderland and Matunuck Hills preserves.
 - Work with towns to incorporate flexible development controls to encourage private efforts to protect the Queen River system.
 - 6) **RI Audubon Society**
 - Continue educating the public about South County's natural heritage.
 - Pursue expansion and linkages of existing preserves in the Queens River watershed.
 - 7) **RI Historical and Heritage Preservation Commission**
 - Support regional cultural and historical preservation efforts.
 - Digitize, update and map in RIGIS all RI historical and cultural inventories for the towns of Washington County.
 - Provide municipalities with technical assistance to create and adopt historic and cultural preservation [overlay] zoning to help protect community character.
 - 8) **RI Department of Environmental Management**
 - Focus acquisitions in *Biodiversity Focus Areas* such as, the Western Forest, Pawcatuck River and South Coastal area with an emphasis on expanding state protected areas such as Carolina, Burlingame, Arcadia (*See 'Protecting Our Land Resources – A Land Acquisition and Protection Plan for the Rhode Island Department of Environmental Management.'* RIDEM. May 1996. Pages 22 – 27.).
 - Provide incentives to municipalities, land trusts and other organizations with additional points for open space and recreational grant applications that implement the South County Greenspace Project.
 - Continue to coordinate with local land trusts and other partners to focus local protection efforts.
 - Continue to support the Washington County Land Trust Coalition.
 - Acquire land that protects aquifers, riparian corridors and regional greenway networks.

- Improve river access with planning and site development, building on the recent work of the Wood-Pawcatuck Watershed Association to evaluate existing and potential access points. (See 'Public Small Craft and Fishing Access Points on the Wood and Pawcatuck Rivers.' Wood-Pawcatuck Watershed Association. November 2001.)
- Identify existing protected areas suitable for access improvements, parking, and facilities development.
- Work with landowners to secure easements to protect the riparian buffer zone and provide facilities for trail users.
- Utilize recreational grant program to promote the development of bikeways, hiking trails and water trails.

9) RI Water Resources Board

- Purchase land or conservation easements around 14 potential wellheads in the Wood, Queens and Beaver Sub-basins.
- Continue statewide water use availability studies and modeling efforts including optimization modeling in the Pawcatuck Watershed.
- Continue to work with local suppliers through set-aside funds that are leveraged for watershed land acquisitions or water quality improvements.
- Develop water allocation program.
- Manage drought events and implement strategies to mitigate future droughts as the lead agency for the Drought Steering Committee.
- Update GIS information for the entire State including Washington County regarding water district boundaries, water lines in roads and pumping points.
- Promote education and outreach activities regarding the value of water, the availability of supply in relationship to demand, the cost to produce water and maintain reliable infrastructure, the effect of water use on the environment and the need to conserve the resource, especially during dry periods.
- Continue to administer the water supply planning process for the states' twenty-nine systems who's plans contain historical and current data regarding source water, infrastructure, production data, volume of water withdraw, water use by category, water quality, supply and demand management.
- Manage the Feasibility of Supplemental Water Supply Study, which identifies additional water supplies and delivery systems in the amount of 50-million gallons per day for emergency purposes.

10) Statewide Planning

- Consider the feasibility of amending the RI State Guide Plan Element #155 – A Greener Path... Greenspace and Greenways for Rhode Island's Future to include the *South County Greenspace Protection Strategy* and its maps.
- Consider the feasibility of creating and adopting a 'Cultural Heritage and Land Management Plan' for the Pawcatuck River Valley (similar to the one for the Blackstone River Valley) into the State Guide Plan.
- Make South County Greenspace Project data available through RIGIS.

11) RI Greenways Council

- Pursue trail planning and acquisition for regional trail systems, building off of existing North-South Trail, South County Bike Path, etc. (*See* State Guide Plan Element 155, Report Number 84, 'A Greener Path... Greenspace and Greenways for Rhode Island's Future.' November 1994. Pages 7.1 – 7.6).
- Identifies local stakeholders for construction and maintenance of specific segments of hiking and biking trails presented in this report.
- Devises a plan of action to develop interpretive materials for natural and cultural resources along trails.
- Identify partners for an action team to develop unified signage and wayfinding materials.
- Work with other partners to complete the South Kingstown Trail (Trustom -> Perryville – Great Swamp -> Rt. 138 Farms -> Eppley to Yawgoo Pond in Exeter.
- Coordinate with RIDEM, South Kingstown Land Trust, Audubon Society of RI on trail planning and construction to extend existing trail systems north and south of Worden Pond.

12) US Fish & Wildlife Service

- Expand and consolidate Refuge Complexes, including Pettaquamscutt (Chafee National Wildlife Refuge), Trustom Pond NWR, and Ninigret NWR (*See* U.S. Fish & Wildlife Service. December 2000. Rhode Island National Wildlife Refuge Complex – Draft Comprehensive Conservation Plan and Environmental Assessment. USFWS. Hadley, MA.).

13) USDA Forest Service

- Support the Forest Legacy Program.



APPENDIX I – [South County Greenspace Project Grant Guide](#)

APPENDIX II – 'Public Small Craft and Fishing Access Points on the Wood and Pawcatuck Rivers.' Wood Pawcatuck Watershed Association, November 2001. Richmond, Rhode Island.